

REMARKS

In response to the Official Action mailed July 27, 2004, Applicant amends his application and requests reconsideration. In this Amendment, claims 17 and 18 are canceled and claims 19-24 are added so that claims 1-16 and 19-24 are now pending. No new matter has been added.

Claim Amendments

Claims 1 and 14 are amended to clarify that the estimated time is estimated based upon a control signal received from the display device (see paragraph 49 of the patent application). Claim 19 is added to reflect that the control signal may be issued by the display device after each horizontal scan line is displayed (see paragraph 66 of the patent application).

The Official Action objects to claims 7 and 8 as allowable but dependent upon a rejected base claim. Accordingly, claim 7 has been rewritten in independent form. Claims 20-24 are added to reflect the limitations of claims 2-6 with respect to claim 7. Thus, claims 7, 8, and 20-24 are in form for allowance.

Response to Rejections

The Official Action rejects claims 1-9 and 15-16 as unpatentable over Applicant Admitted Prior Art (AAPA) in view of Sasaki et al. (US Patent 6,549,948, hereinafter Sasaki). That rejection is respectfully traversed.

Sasaki fails to teach or suggest all of the limitations of claims 1 and 9. Namely, Sasaki fails to teach receiving notification of an estimated time when a future frame will be displayed on the display device, *wherein the estimated time is estimated based upon a control signal received from the display device*. Though Sasaki does teach preparing frames based upon an estimated display time, that estimated time is estimated based upon the required display time of the foregoing frames, the CPU load during the foregoing frames, and the current CPU load (see column 15, lines 56-67 of Sasaki). Basically, Sasaki estimates the display time according to CPU load. By contrast, the present invention estimates display time is based upon a control signal received from the display device. This control signal (and collectively, control signals from other display devices) function to provide a system-wide clock that can be used to efficiently prepare frames for display (see paragraph 43 of the patent application). Since the control signal comes from the display device itself, the estimated time based on the control

signal is more accurate than, for example, an estimation based on CPU load (see paragraph 45 of the patent application).

Furthermore, the combination of the AAPA and Sasaki fails to teach or suggest the limitations of claim 19. In addition to not teaching the control signal, as previously explained, Sasaki is says nothing of estimating display time based on the completed display of each horizontal scan line, which provides more accurate timing information.

Thus the combination of the AAPA and Sasaki fails to teach or suggest all of the limitations of claims 1-6, 9, 15, 16, and 19. Accordingly, *prima facie* obviousness has not been established, and the rejection should be withdrawn.

The Official Action rejected claims 10-14 and 17-18 as unpatentable over AAPA in view of Bates et al. (US Patent 6,760,048, hereinafter Bates). That rejection is respectfully traversed with respect to claims 10-14, as claims 17-18 are now canceled.

The combination of the AAPA and Bates fails to teach or suggest all of the claim limitations. Namely, the combination fails to teach or suggest *receiving occlusion information indicating that at least a portion of the display information will be occluded on the display device, wherein the occlusion information is based at least in part upon display information from a different display source, and if at least a portion of the display information will not be occluded, then preparing only non-occluded portions of the display information, and not preparing occluded portions of the display information*, as recited in claims 10 and 14. The Official Action asserts that these limitations are taught by Bates. However, Bates does not teach that a display source receives occlusion information based upon display information from a different display source. In Bates, occlusion information is determined by a window manager. If a display element is occluded, it is not rendered (see column 7, lines 28-65 and Figure 3 of Bates). Bates does not teach that this occlusion determination is passed on to display sources, or that display sources receive this occlusion information. In Bates, as in the AAPA, each display source has no knowledge of the other display sources' output.

Moreover, Bates fails to teach not preparing occluded portions of the display information. In fact, Bates teaches the exact opposite. In Bates, if a prioritized display element is determined to be occluded, that display element is then rendered in an area of the window where it will not be occluded (see column 19, lines 1-10 of Bates). Thus, the display information is still prepared. Furthermore, the display sources are not made aware of occlusion information, as previously discussed, and therefore cannot determine what display information to prepare based on occlusion information. Only the windows manager is aware of occluded

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display elements, and it is the windows manager that determines whether the already-prepared display information is to be rendered (see column 19, lines 1-10 of Bates). By contrast, the present invention saves processing resources by informing display sources of occlusion information so that occluded display elements need not be prepared at all.

Thus the combination of the AAPA and Bates fails to teach or suggest all of the limitations of claims 10-14. Accordingly, *prima facie* obviousness has not been established, and the rejection should be withdrawn.

Reconsideration and withdrawal of the rejections are earnestly solicited.

Respectfully submitted,



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